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March 24, 2000

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TO:

Internal file

THRU:

Michael Suflita, Team Lead

RE:

Permit Drawings Revision, PacifiCorp, Deer Creek Mine, ACT/015/018-00A

SUMMARY:

The Division received an amendment to update two maps in the Mining and Reclamation Plan (MRP). This Technical Memo is a review of primarily the Hydrologic aspects of the submittal and is not all-inclusive. There are deficiencies resulting from the review.

TECHNICAL ANALYSIS:

OPERATION PLAN

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-764.

Analysis:

Diversions

The submittal consists of two maps, <u>3-9 Deer Creek Mine Surface Yard Map DS202E</u>, and <u>2-17</u>, <u>Deer Creek Coal Mine, Mine Plan Area Soils Map CM-10344-DR</u>. Both are certified by a Registered Engineer. The accompanying cover letter indicates the new maps were submitted after a recent field

inspection showed some minesite drainages were not shown on the map. The letter also indicates the additions and deletions on the revised drawings. However, one of the additions to drawing DS202E, an ASCA Table, could not be found. Several of the diversion ditches appeared to improve the site by directing the water and thus controlling erosion. The new berms appear to enhance safety at the edges of several flat areas and the berms help direct water flows.

The Disturbed Area boundary has been changed in the southwest corner of the site as a result of identifying diversion ditches in the area. One <u>new</u> diversion ditch is shown on the map west of the mine office/bathhouse. The engineering design of this ditch to meet regulatory design storm events was not included with the submittal. The design for this ditch will need to be submitted before the revised map can be approved. See Regulatory Reference R645-301-742.300 for the appropriate design criteria. Also, the Division Position Paper on Design Storm Event Criteria, August 20, 1992 indicates all drainages leading to the sediment pond should be designed for a 10-year, 24-hour event.

The new map shows the disturbed area much more clearly than the map which it replaces. Upon reviewing the Disturbed Area boundary and constructed features at the minesite the following areas were found to be outside the Disturbed Area boundary. The boundary will need to be redrawn to include these features. The Disturbed Area will need to be re-staked in the field to properly delineate the minesite.

- A 10-inch water line, north of the truck loadout,
- A 10-inch water line & 8-inch sewer line, north of the road in the upper right of the map,
- A newly added berm and ditch, northwest of the mine office/bathhouse.

The water bars on the fan access road do not show which way the water flows. This needs to be added to the drawing.

Findings:

In its present form the submittal does not meet minimum regulatory requirements. Accordingly, the Permittee must address those deficiencies as found within this Technical Memo and provide the following, prior to approval, in accordance with the requirements of:

R645-301-740, provide revisions to the map as detailed above, designs showing the adequacy of the new ditch, and re-stake the revised Disturbed Area boundary in the field.

RECOMMENDATION:

The proposed amendment should not be approved in its present form.